A co-belligerent article from Robert S Lopez

EAST AND WEST IN THE EARLY MIDDLE AGES: *Economic Relations* *

The early mediaeval economic relations between Catholic Europe and the « Eastern World » — that is, Byzantium and Islam — have long been on the agenda of our international gatherings. The Fifth Historical Convention at Brussels in 1923 heard Henri Pirenne announce for the first time what was to be the leading theme of his last and most stimulating, if not most convincing book, « Mahomet et Charlemagne ». It is a good omen, as well as an act of devotion, for us to begin by paying tribute to the memory of the great man who did so much to enlarge our horizon. We owe it largely to his challenge if the western diptych of Romans and Germans, which had been so prominent in our studies, has been displaced by a broader and richer picture, where the Roman-barbarian element is balanced by the Islamic and, let me add, the Byzantine counterpart.

It would be better still to shift the focus of investigation further away from the meridian of Greenwich and that of

* Per accordi presi con la Giunta Centrale per gli Studi Storici, il presente rapporto è stato redatto in inglese e abbraccia le relazioni commerciali tra l'Occidente inteso come i paesi d'Europa non occupati dai Musulmani o dai Bizantini (l'Europa cattolica, come sarebbe più esatto dire) e l'Oriente inteso come il territorio bizantino e musulmano anche quando arriva fino ai Pirenei e al golfo di Venezia. Restano esclusi i territori sotto l'influenza scandinava e i dati forniti da geografi musulmani, che spettano ai rapporti dei professori Petersen e Spuler. Le note non mirano alla compiutezza bibliografica ma si limitano a citare, dovunque è possibile, lo studio più recente che contenga indicazioni ulteriori sulla « letteratura » dell'argomento.

Rome to encompass the economic history of the whole hemisphere between the Atlantic and the Pacific, the strait of Gibraltar and the islands of Japan. Of this vast continent Europe is no more than a peripheral peninsula. A hemispheric projection would enable us to envisage the early middle ages not as a period of comparative gloom, but as the high light of three great civilisations: Byzantine, Arab, and T'ang Chinese. Obviously that light had to become dimmer as it reached the western and eastern outskirts of the continent. Yet there were broad and significant transmissions of techniques and ideas in the early middle ages: Christianity, Islamism and Buddhism spread over immense distances; the silkworm, paper, the horseshoe, the water mill conquered one country after another. The progress of geography from the time of Ptolemy to the end of the first millennium was proudly summed up by al-Biruni as follows: « The different peoples are brought together in mutual understanding. To obtain information concerning places of the earth has become incomparably safer and easier ».

Problably al-Biruni was too optimistic, as intellectuals are apt to be, when he associated the advance of knowledge with international harmony. To be sure, merchants and missionaries did their bit, as they usually do, but war was the overwhelming pressure that squeezed different peoples together, the Arabs playing a decisive part because of their central position and relentless expansionism. The first half of the eighth century had the dubious distinction of witnessing the earliest « hemispheric war », as the Arabs waged great battles almost simultaneously against Chinese, Hindu, Byzantine and Frankish armies. Then the crimson battlefields were trodden by merchants, who went much farther than the soldiers, all the way to Korea and Mozambique, Russia and England.

Hemispheric economic history may some day help us solve problems on which western evidence is unavailable or obscure. Investigation into the links between European monetary trends and the production of precious metals in Asia

and Africa has barely begun. More telling results can be hoped for, even though production figures are usually unreliable or altogether unknown. The rich data of Chinese censuses, once their many obscurities and apparent contradictions are eliminated, should throw indirect light upon the demographic trends of the West; for there are indications that throughout the hemisphere demography followed much the same pattern. Who knows? Perhaps a common explanation will be found for the fact that the growth of monastic and ecclesiastical estates alarmed governments and suggested confiscatory measures at about the same time in the T'ang empire, in the domains of the Iconoclast emperors, and — more mildly — in the kingless kingdom of Charles Martel.

I cannot think of a better occasion than this to invite the specialists and masters of Western, Near Eastern, and Far Eastern problems to collaborate. Yet I must admit that we are not ready for hemispheric history — or, at least, I am not ready. Let me retreat to more familiar ground and grapple as best I can with the many riddles of European economic history in the early middle ages.[1]

I.

Of the many elements which give shape to the economy of a period, quantity or volume is the first that comes to mind. It is not, I believe, the most important; the largest building is not necessarily the best balanced and the fittest to satisfy the economic needs and aspirations of men. But it can hardly be denied that in the reconstruction of economic organization and processes of the early middle ages we want

[1] Here and henceforth I refer the reader to the bibliographies of « Cambridge Economic History of Europe », II, Cambridge (1952), for further information. Some of the topics included in this report will be dealt in greater detail in my forthcoming volume, *Oriente e Occidente*, now being prepared for the Einaudi Press of Turin.

first of all to have some idea of the absolute figures that were involved ; all the more so, when the object of investigation is trade between countries at obviously different economic levels, Catholic Europe and the Byzantine-Islamic « East ». When Henri Pirenne postulated a catastrophic decline of that trade, he thought in terms of quantitative, not merely qualitative diminution ; so do those who challenge his theories. No matter how earnestly we state that early mediaeval quantities are unknown and unknowable, we are always haunted by considerations of size. How large was the trade between the West and the East at that period — if not absolutely, in comparison with that of antiquity and that of the later middle ages ? How great was the disparity between the rustic West and the refined East, and how did it affect the balance of trade ? Not long ago, I tried to dodge these embarrassing questions by noting that quality is better known and more important than quantity. It is, but our inquisitiveness will not be satisfied unless we endeavor to establish, if not a definite figure, at least a maximum and a minimum between which our imagination must be confined.[1]

It seems therefore unavoidable that we try to salvage whatever we can from the rare and usually disreputable statistical information that emerges from the early middle ages. I am about to proceed, tentatively and reluctantly, upon most slippery ground ; I am aware of the pitfalls and conscious that I shall not escape all of them. Still, mentioning a few questionable figures should not be more dangerous than guessing at figures by ascribing a general statistical meaning to scattered, non-statistical information such as the comments of a chronicler on a « very rich » merchant here

[1] « Cambridge Economic History », II, 258 ; cf. R. DOEHAERD, *La Mediterranée au haut moyen âge*, in « Journal of World History », I (1954) ; C. M. CIPOLLA, *L'économie politique au secours de l'histoire*, in « Annales (Economies, Sociétés, Civilisations) », IV (1949), seems too defeatist.

and a « very large » market there ; for this is the material upon which estimates of size have so far been based.[1]

The majority of figures comes from Islamic writers, who often display in statistics the same fantasy that has made the Arabian Nights famous. This holds even for the best among them. In the ninth century Ibn Khurradadhbah, to whom we owe a meticulous and apparently accurate account of the Abbasid budget and road system, ascribed to Rome (which he may have confused with Constantinople) precisely 1.220 stylite monks perching on as many columns ; much later the great Ibn Khaldun, forgetting his own denunciation of historians who uttered « lies and extravagant data in regard to amounts of money or the size of an army », cited a Caspian city with ten thousand gates. Moreover, the economic history of Islam is still in its infancy, so that we have virtually no modern reappraisal of the sources. Byzantine chroniclers inherited the classic tradition of regarding economic matters as sordid and unworthy of literary attention. Their figures do not betray absurd exaggerations or deliberate distortions, but they are exceedingly rare. Western chroniclers had virtually no use for numbers other than those endowed with mystical virtues. It is a partial compensation that western archives have preserved small groups of private documents, especially from Italy, where the price actually paid for an article is mentioned ; but this in no clue to the total size of trade. No private documents have come down to us from the early mediaeval Byzantine and Islamic world, except for Egyptian papyri of the initial period. While Sauvaget has endeavored to explain the lack of surviving Islamic archives, I have voiced my wonder at the total dispersion of early Byzantine archives, which must have been very rich ; both of us have expressed the wish, which will certainly be shared by many, that some fragments

[1] See lastly J. LESTOCQUOY, *Le paysage urbain en Gaule du V^me^ au IX^me^ siécle*, in « Annales (E. S. C.) », VIII (1953). Excessive reliance on comments of this kind impairs very seriously, in my opinion, the work of Alfons Dopsch and his school.

may eventually turn up. Furthermore, two groups of private documents have recently come to the fore. One of them consists of records written on tree bark, which are being unburied at Novgorod and elsewhere in Russia ; what little has been published does not yet justify the enthusiasm with which the discovery was announced. The other group — Jewish records from the *Geniza* of Cairo — is of the highest importance, but it does not seem to go farther back than the eleventh century.[1]

One set of quantitative data is there for anybody to measure : the area of early mediaeval towns. The most accurate archaeological surveys come from Sweden and the opposite Baltic coast, partly because the towns were successively abandoned and there is no obstacle to their being excavated. We are struck by the smallness of their size : to quote only one instance, the walls of Birka enclose no more than 14 hectares (0,14 km², half the surface of Roman Marseille), a large portion of which was never occupied by buildings. Yet Birka in its early mediaeval prime was one of the Swedish royal sees, the residence of a governor, and a prominent Scandinavian and Frisian market. Hundreds of Arab and Byzantine coins found in its soil are but one of the indications of its importance in the trade between the East and the West. The towns of early mediaeval France, Germany and the Low Countries, whose areas have been carefully studied and mapped, were seldom larger ; they also contained wide empty spaces within the walls. Paris was barely eight hectares ; Tournai was twelve ; abnormally large Cologne embraced 96 hectares in the « Altstadt » (to which a suburb was added as early as the tenth century), but much of the space was under cultivation as late as the

[1] J. SAUVAGET, *Introduction à l'histoire de l'Orient musulman*, Paris, 1943 ; R. S. LOPEZ, *Un borgne au royaume des aveugles*, in « Bulletin semestriel de l'Association Marc Bloch », Toulouse (1953-54) ; R. SMITH, *Some Recent Discoveries in Novgorod*, in « Past and Present », fasc. 5 (May 1954) ; S. D. GOITEIN, *From the Mediterranean to India*, in « Speculum », XXIX (1954).

thirteenth century. These modest figures ought to brake us whenever we are tempted to be overenthusiastic : it would be absurd to suppose that towns of that type had room for more than a few hundred or, at most, a few thousand inhabitants, not all of whom took active or passive part in trade. Though southern towns problably averaged slightly larger surfaces, it is unlikely that any of them exceeded ten thousand inhabitants.[1]

How do western data compare with those on eastern cities ? I shall consider only the most illustrious example, Constantinople. It was by far the greatest city in the Byzantine empire, and we have good reasons to assume that it was second to none of the Islamic cities. The surface of Constantinople within the walls of Theodosius II, Heraclius and Leo VI was just over fourteen square kilometers (about 1.420 hectares), that is, a hundred times as large as Birka but barely larger than Rome within the Aurelian walls (13,86 km²). To Aurelian's Rome Ferdinand Lot ascribed some 220,000 inhabitants, under the assumption that most of it was thickly settled. Some scholars have called this estimate too conservative ; it seems fair or even generous to me. In the eighth century Ch'ang An, the sprawling T'ang capital, had approximately one million inhabitants within walls which enclosed a surface of eighty square kilometers ; it would be hard to believe that a European city was more overcrowded than the thriving Chinese metropolis. Early mediaeval Constantinople, however, was much more sparsely settled than either Ch'ang An or Aurelian's Rome. The sections near the shore were comparatively crowded, but wide spaces were set apart for palaces (some of which lay in ruins), and the entire central section, the Lykos valley, was available for the foundation of monasteries endowed with vast

[1] For Scandinavia see Prof. PETERSEN's bibliography. For France, F. L. GANSHOF, *Etude sur le développement des villes entre Loire et Rhin au moyen âge*, Paris-Bruxelles, 1944 and F. LOT, *Recherches sur la population et la superficie des cités remontant à la période gallo-romaine*, Paris, 1945-46.

orchards and vineyards. In time of war, walled Constantinople easily found room for the population of entire provinces ; after the plague of 747, Constantine V had to invite settlers from all of the Greek mainland and islands to relieve the squalor of an empty capital. It is impossible to estimate the exact population at any period between Heraclius and Leo VI, but I should say 100,000 is a more likely guess than the half million or even a million that have been postulated. That would still make early mediaeval Constantinople a giant as compared with its western contemporaries, but not as large as Venice, Milan and Florence in their later mediaeval prime. This conclusion agrees with other evidence on the economic development of the city.[1]

Someone might object that the size of towns has no great significance since the economic life of the early mediaeval West was centered in manors and monasteries, and since lay and ecclesiastic grandees rather than burghers were the chief customers of Eastern trade. To the extent to which these statements are valid, they are still another warning against overenthusiasm. Only a minority of the noblemen had anything to buy from or sell to the East, and their total numbers were small. In the early tenth century a chronicler addicted to exaggeration estimated that the battle of Firenzuola cost 1.500 lives ; fifty years later another chronicler ascribed the persistent thinness of the class of knights in Italy to the fact that the gaps left by that battle had never been closed. Even in the twelfth century England has been estimated to have no more than 7.000 knights out of a total population of three million. In the East armies were much

[1] L. Bréhier, *La Civilisation byzantine*, Paris, 1950 ; cf. S. Balasz, *Beiträge zur Wirtschaftsgeschichte der T'ang-Zeit*, in « Mitteilungen des Seminars für Orientalische Sprachen, F.-W. Un. zu Berlin », XXXIV-XXXVI (1931-33). For China, however, I have used chiefly the data which Professor Edward Kracke (Chicago) kindly gathered for me ; for Constantinople I have used my own judgment and the preliminary data collected by my student John Teall (Dumbarton Oaks). Further details in my forthcoming article, *Le città dell'Europa post-carolingia*, « Atti della seconda Settimana di studi sull'alto medioevo in Spoleto », 1954.

larger ; still, the capture of 15.000 Bulgarians by Emperor Basil II was enough to cause the collapse of a state which several times during several centuries had brought the Byzantine Empire to the brink of disaster. Indeed, whatever demographic evidence we have for the early middle ages indicates a very low level for the entire population. The incomplete statistics of the *Domesday Book* suggest for England a population barely above one million, with a density of about nine inhabitants per square kilometer ; but this was in 1086, when the great demographic growth of the later middle ages had been on its way for more than a century. Again, the more advanced empires of the East had populations much larger than those of the West, yet smaller than those of earlier or later periods. In the absence of comprehensive data for Byzantium and Islam, we may recall that Chinese censuses of the early middle ages constantly indicate figures below fifty millions (with an approximate density of twelve inhabitants per square kilometer), as against almost sixty in the early first century and perhaps ninety in the eleventh.[1]

One wishes there were more direct ways than demography to probe the size of Western trade. Unfortunately the sweeping generalizations which have been built upon numismatic evidence are utterly unsafe. Highly interesting though they are, all data are as ambivalent as Pythian oracles. Though the widespread use of barter is prima facie evidence of a weakened commercial economy, it is not incompatible with trade and it may occur in times of economic expansion.

[1] J. Russell, *British Medieval Population*, Albuquerque, New Mexico, 1948 ; for China one may see the articles of Bielenstein and Yang, respectively in « Bulletin of the Museum of Far Eastern Antiquities », Stockholm, XIX, and in « Harvard Journal of Asiatic Studies », IX. Without challenging the comparatively high density figures obtained by Van Werveke for a few villages in the ninth century, I believe they are not representative of the overall density of the country. « Les hommes », said Marc Bloch, « vivaient répartis en groupes fort inégaux que séparaient de larges espaces vides » (« Annales d'Histoire Sociale », II [1945], p. 13).

Changes in monetary standards such as the shift from gold coinage to silver coinage or the variation in weight of a coin do not always correspond to general economic changes but can be linked to new conceptions of political prestige, the influence of foreign coinages, or the changeable cost and availability of precious metals. To regard a mediaeval state that preserved the gold standard as richer than one which adopted the silver standard is not safer than to syllogize that since the English pound is worth more than the American dollar, Great Britain must be richer than the United States. Hoards do not necessarily tell what coins were predominantly used but merely what coins were withdrawn from circulation ; it is usually impossible to decide whether they stored the proceeds of commerce, war booty, tributes, foreign employment, or domestic taxation ; they do not represent a cross-section of the coinage existing at a certain period since their distribution depends upon chance findings or localized archaelogical exploration.[1]

We cannot at all rely upon coinage as an indication of the size of trade unless we know its total mass, the velocity of its circulation, and the level of prices. It is true that we have abundant evidence to show that throughout the early middle ages prices tended to stagnate at a very low level, the West being much more depressed and stagnant than the East. Moreover, there are good reasons to believe that circulation was sluggish, especially in the West. On the mass of coinage, however, we possess only one vague indication of the output of the mints of Pavia and Milan, which struck nearly all of the coins issued in comparatively advanced Upper

[1] P. GRIERSON, *Numismatics and History*, London, 1951, very cogently has shown the aid that coinage can give to economic history — see also his report on Medieval Numismatics, « Congrès International de Numismatique », Paris, I (1953) — but has implicitly recognized the uncertainty of conclusions drawn exclusively on the basis of numismatic evidence. See also my discussion of *The Dollar of the Middle Ages*, in « Journal of Economic History », XI (1951) and of *Il ritorno all'oro nell'Occidente Duecentesco*, Napoli, 1954.

Italy ; and even that depends upon a dubious interpretation of an obscure source. According to the *Honorantie civitatis Papie* both the moneyers of Pavia and those of Milan paid the government £ 16 yearly for the monopoly of striking and the lease of the mint house ; another passage of the same document seems to mean that they kept as seignioriage (the reward for transforming precious metal into coins) two of every twelve silver deniers they struck. If this interpretation is correct, the moneyers in each mint had to strike £ 96 (that is, 23.040 silver deniers with a total silver content of some 30 kgs.) to recover the rent, before they could pay the cost of manufacturing and gather any profit. Obviously the average output was well in excess of that sum ; the moneyers wanted to gain and did gain. But it is unlikely that the excess was too great, for otherwise one would expect that the government would have raised the rent. Be that as it may, an output of 25, 50, or even 100 thousand silver deniers in the principal mints of Northern Italy is almost unbelievably small. It can be explained only by considering that many foreign coins circulated together with the local coinage, that the purchasing power of the denier was abnormally high, and, above all, that money was almost tangential in the economic life of Catholic Europe. Inasmuch as most local transactions were carried out by barter and payments in kind, what coinage there was remained available either for hoarding or for long-distance trade.[1]

Two examples will suffice to illustrate the contrast between impecunious Catholic Europe and the Islamic world. In the early tenth century, when the combined rent paid by the moneyers of Pavia and Milan was no more than £ 32,

[1] R. S. LOPEZ, *An Aristocracy of Money in the Early Middle Ages*, in « Speculum », XXVIII (1953). The obscure passage (« faciant... denarios... de pondere et argento de duodecim in decem ») has been interpreted by Landogna, Solmi, and myself as expressing the seignioriage. It might also refer to the alloy of the denier. Both interpretations are possible in the light of other extant evidence, and the Latin is too ungrammatical for us to decide on philological grounds.

or 7.680 silver deniers, the Umayyad Caliph of Spain was said to receive annually as dues from the mint of Cordoba 200.000 gold dinars, which were worth 3.400.000 silver dirhams at the current rate of exchange. Since a dirham contained almost twice as much silver as an Italian denier, the sum would have been almost a hundred times as large as the rents of Pavia and Milan ! To be sure, the reliability of the Arab geographer to whom we owe the figure for Cordoba is not above challenge. But there seems to be little reason to doubt the accuracy of the extant tax rolls of Harun al-Rashid, the famed Abbaside Caliph. His annual income from taxation, besides payments in kind, amounted to 5.706.000 dinars and 404.780.000 dirhams. This does not include the tribute of between 70 and 90 thousand gold besants which Empress Irene was forced to pay him every year. It would certainly be improper to compare the income of the despotic sovereign of an immense empire to the rents trickling into the meager treasury of the small and disintegrating kingdom of Italy. Still the distance between Baghdad and Pavia is too abysmal to be entirely accounted for by the difference in size and political efficiency of the two states. One cannot help thinking of the economic, social and cultural disparity which intervenes between a great, civilized nation and a cluster of backward tribes.[1]

Occasional figures on private wealth and individual payments confirm the impression we have obtained from other data. Unfortunately we cannot accept at face value certain stunning, but uncontrollable Islamic references. When we hear of a Baghdad jeweler who in the early tenth century

[1] Ibn Hawqal in Sauvaire, « Journal Asiatique », ser. 7, XIX (1882), p. 115 ; and see G. C. Miles, *The Coinage of the Umayyads of Spain*, New York, 1950 ; document in Von Kremer, « Verhandlungen des VII. Internationalen Orientalisten- Congresses », 1888 ; for comparison with late mediaeval Western figures we may note that in 1365-66 the mint of Genoa struck 252.916 gold genoins besides silver and copper coinage, and that the earliest budget of the French kingdom in 1202-03 recorded an income of £ 197.000 Parisis.

remained rich after Caliph al-Muktadir had confiscated 16 million dinars of his wealth, we are led to doubt the accuracy of the information. We know that in that century the 10% tax on the sea trade of Siraf, the greatest Persian port and the terminus of India and China voyages, fluctuated between 253.000 and 316.000 dinars per year ; it seems unlikely that a private individual could so easily part with a sum which was more than five times the total value of the Siraf trade during a whole year. But we have no such strong reasons to challenge the Byzantine references to a merchant of wax, the most conspicuous nouveau riche in Costantinople in the early ninth century, who was tricked by Emperor Nicephorus I into surrendering most of his capital, 7.200 gold besants, in exchange for the honor of an invitation to the imperial table. The sum is impressive, but not greater than the lump payment which the provincial Byzantine town of Ephesus owed every year for the privilege of holding a market, until Emperor Constantine VI waived it in honor of St. John the Evangelist, the patron of the town.[1]

To find in the West figures approaching that magnitude, we have to scan the documents for names of ruling princes. In 829 the Venetian Doge, Giustiniano Partecipazio, who was the richest merchant in his town and probably the greatest landowner, disposed in his will of £. 1.200 (that is, 288.000 silver deniers) invested in maritime trade. Venice was almost a Byzantine city ; yet even there a sum of that size must have been quite exceptional. As late as the early twelfth century we find that the ownership of an anchor represented such an important capital that it was often divided between five or six co-owners who rented the anchor by notarial contract for individual voyages. Further inland in the Po valley we come across an abbess who in the eighth century pays 5.488 gold *solidi* (that is, 16.464 *tremisses*) in

[1] A few additional data on private wealth can be found in A. Mez, *Die Renaissance des Islams*, Heidelberg, 1922, and A. Andréadès, *De la Monnaie et de la puissance d'achat des métaux précieux dans l'empire byzantin*, in « Byzantion », I (1924).

cash through a small number of contracts ; but she is the daughter of Desiderius, the last Lombard king. Still earlier is the loan of 7.000 gold *solidi* which Merovingian King Thierry I is said to have given the Bishop of Verdun, who used them to restore the prosperity of the merchants in his town. This payment, however, is not certified in notarial documents but only reported by a chronicler who may have been prone to exaggeration.[1]

Is there any way to press our investigation closer to the core of our theme by estimating the volume or value of specific wares imported from the « East » to the « West » or from the « West » to the « East » at a certain period ? Not infrequently Western documents give us short lists of wares which obviously came from the Byzantine or the Islamic world. There are the often cited shopping lists of the monastery of Corbie, with a wide range of Eastern consumers' goods such as 30 pounds of pepper and 50 *tumar* (sheets, not reams !) of papyrus in the late seventh century, which become 120 pounds of pepper and one denier worth of papyrus in the ninth or tenth century. But the needs of Corbie may not have been typical of the many other monasteries scattered through the Catholic world ; nor are the lists safe indications even for Corbie, for the earlier one is a record of custom exemptions which may have covered larger or smaller quantities than those actually imported, and the later one is a memorandum of goods to be purchased only « si

[1] Cf. G. LUZZATTO, *Studi di storia economica veneziana*, Padova, 1954 ; R. DOEHAERD, *La richesse des Merovingiens*, in « Studi in onore di Gino Luzzatto », I, Milano, 1950 ; C. VIOLANTE, *La società milanese nell'età precomunale*, Bari, 1953 ; for a gloomier view of Lombardy G. P. BOGNETTI, *Il problema monetario dell'economia longobarda*, in « Archivio Storico Lombardo », LXIX (1944) ; for a brighter view of Campania and Spain N. CILENTO, *Le condizioni della vita nella contea longobarda di Capua*, in « Rivista Storica Italiana », LXIII (1951) ; L. G. DE VALDEAVELLANO, *Economia natural y monetaria en León y Castilla durante los siglos IX, X y XI*, in « Moneda y Crédito » Sept. 1944 ; C. SANCHEZ-ALBORNOZ, *El precio de la vida en el reino asturleonés hace mil años*, in « Logos ». Buenos Aires, III (1945).

pretium habemus ». If we turn to lists of textiles and other durable goods of Oriental origin in Western churches and palaces, or to such specimens as are still preserved in sacristies and museums, we face much the same problems as in dealing with monetary hoards. Precious objects are not worn frequently and do not wear out quickly, but they are usually stored away most of the time. It is hard to tell how far their relative abundance in one place reflects their general distribution, or how long it has taken an institution to gather a number of them in its treasury ; moreover, it is seldom possible to decide whether they have been acquired through purchase, looting, tribute or gift. Some objects which King Aethelstan donated to the Exeter cathedral in the tenth century have been traced back to the gifts of Harun al-Rashid to Charlemagne more than a hundred years earlier. Had we come across them in a mediaeval catalogue or a modern collection without knowing their story, we might have regarded tham as evidence of trade between Exeter and Baghdad in the age of Aethelstan.[1]

It is equally difficult to find reliable data on « Western » exports to the « East ». One figure, however, seems to have special significance. We know that slaves were the most valuable, if not the bulkiest export of Catholic Europe to the Islamic countries ; Muslim Spain was one of the best customers and, in Spain, the Umayyad caliph was probably the highest bidder. According to a late Arab writer whose information usually derives from excellent sources, the number of *Sakaliba* slaves (mostly eunuchs of Slavonic origin, but also European slaves in general) who served in the Umayyad armies and in the caliphal administration and household rose from 3.750 to 13.750 between 912 and 961. An increase of ten thousand units in fifty years indicates that the volume of trade was far from negligible. Yet it is not

[1] E. SABBE, *Papyrus et parchemin au haut moyen âge*, in « Miscellanea Leonis van der Essen », I (1947) ; L. H. LOOMIS, *The Holy Relics of Charlemagne and King Athelstan*, in « Speculum », XXV (1950).

impressive when we consider that slaves headed the list of imports from Catholic Europe, that some Sakalibas were not purchased from merchants but captured in war, and that others may have been born in captivity from Sakalibas who were not eunuchs.[1]

Space forbids a more detailed discussion or a longer search for statistical data. Those we have cited may be vague and unreliable, but they all convey the same impression: the great disparity between Catholic Europe and the Byzantine and Islamic world placed a very low ceiling upon the volume and value of exchanges. We must be on our guard lest the often recurring mention of Eastern goods in the West and Western goods in the East induces us to magnify the intensity of commercial relations. Sometimes the very rarity of a foreign article causes it to be reported more prominently than its importance would warrant: a gift of a woolly stuff obtained from a sea shell and sent by an Italian princess to the Abbaside Caliph al-Muktafi in 906 was mentioned again and again in Islamic books, and, in a slightly blurred way, even in the official T'ang annals of China.[2] Still, the vast resonance of this episode is a significant indication that novelties introduced from afar found people eager to receive them, anywhere in Asia. As we noted in the beginning, quantity is not the only thing that matters in economic history. It was definitely subordinated to quality when purchasing power was concentrated in a few hands and the common man was almost crowded out of the political, cultural, and economic scene. Even as the Carolingian military and intellectual renaissance had a great influence on general history though it affected directly but a handful of men, so whatever international commerce there was at the same period, regardless of its absolute size, must have played an important part in the economy of Europe.

[1] E. LEVI-PROVENÇAL, *L'Espagne musulmane au X^me siècle*, Paris, 1932.

[2] G. LEVI DELLA VIDA, *La corrispondenza di Berta di Toscana col califfo Muktafi*, in « Rivista Storica Italiana », LXVI (1954); and cf. INOSTRANCEV, quoted there.

II.

The second point we have to investigate is the problem of continuity. Granted that alternations of better and worse periods are unavoidable in any protracted economic activity, and that large scale commerce in early mediaeval Catholic Europe cannot be expected at any period, can we assume that commercial relations with the Byzantine and Muslim world were never interrupted, or do we have to look for a total eclipse at a certain moment?

For the fifth, sixth, and early seventh centuries the question does not arise. Virtually nobody believes any more that the barbarian invasions of the fifth century marked a sharp turn in economic history, although most historians will admit that the meeting of German immaturity with Roman decrepitude accelerated the process of disintegration whose first symptoms can be traced as far back as the age of the Antonines. The sixth century culminated in the partial restoration of Mediterranean unity under Byzantine auspices. Astride that century and the following one the letters of Gregory I give us a full documentation of continuing, if thinned out, intercourse between the Mediterranean East and virtually all parts of Europe. Under Justinian, China, had unwittingly made its earliest contribution to the economic equipment of Europe — the silkworm — and in the time of Heraclius Egyptian ships again crossed the strait of Gibraltar to obtain English tin. Slowly but steadily, the Western barbarians rebuilt a network of communications with one another, ultimately leading to the more refined East. Countries which in antiquity had been almost untouched by Rome, such as Ireland and the Baltic regions, now began to look toward Constantinople. What commerce had lost in intensity was partly compensated for by gains in geographic expansion.[1]

[1] To the bibliography of « Cambr. Econ. Hist. », II, pp. 540-41, add that of A. R. LEWIS, *Le commerce et la navigation sur les côtes atlantiques de la Gaule du V^me au VIII^me siècle*, in « Moyen Age », XLIX (1953).

Paradoxically, the absolution of the backward Germans paved the way for an indictment of the progressive Arabs. While some scholars were content with mild accusations and roundabout charges — the Arabs weakened the international trade of the Mediterranean by moving the economic center of gravity eastwards to Irak and Persia, or by touching off a Byzantine reprisal blockade across the traditional sea routes — Henri Pirenne made the Arabs squarely and directly responsible for pulling an iron curtain which separated the Believers from the Infidels and left Europe an economic and cultural dead end. His superb pleading and his personal charm won many converts. Nevertheless, a large number of scholars — the majority, I should say — were not convinced. For the last twenty years nearly all that has been written on early mediaeval economic history has reflected the heat of the controversy on « les thèses d'Henri Pirenne ». Probably the law of diminishing returns should persuade us to move on to equally controversial and less belabored fields. This does not exempt us, however, from recalling briefly the main issues. Inasmuch as I have long been an admirer of Pirenne but an opponent of « Mahomet et Charlemagne », I shall not pretend impartiality.[1]

It has been argued that Arab regular fleets and piratical parties made the Mediterranean impassable for Christian ships at one time or another. For short intervals and in specific areas, this is an undeniable fact. To the many instances cited by Pirenne and his followers I would like to add a testimony they overlooked : the Life of St. Gregory Decapolites (780-842). It describes the Byzantine ships and sailors of Ephesus as bottled up in the port for fear of Islamic pirates, a ship of Enos as chased along a river by Slavic pirates, and navigation from Corinth to Rome as

[1] The voluminous bibliography of the subject is listed and summarized for the larger part in A. Rising, *The Fate of Henri Pirenne's Theses*, in « Classica et Medievalia », XIII (1952). Here and henceforth in this section I refer to that article for further documentation.

extremely dangerous on account of Sicilian pirates.[1] Still it is obvious that pirates could not have multiplied and survived without trade to prey upon. There always were calmer interludes and fairly safe detours ; and even the worst hurdles could be leaped over by fast blockade runners or smashed through by heavily protected convoys. To be sure, all of this made the high cost of transportation still higher ; but cost was not the main consideration in the international trade of the early middle ages, which both before and after the coming of the Arabs consisted above all of luxury wares and war materials. At any rate, war hazards are far from incompatible with commercial expansion and trade in cheaper goods. In the thirteenth century both war risks and the volume of trade in the Mediterranean world grew to unprecedented amounts.

It has been claimed, openly or by implication, that the conflict between Muslims and Christians differed from other collisions in the Mediterranean because it was an « antagonism between two creeds » or, indeed, between « two worlds mutually foreign and hostile ». Even on theoretical grounds, this contention is questionable. Their paths diverged more and more with time, but originally both the Arabs and the Germans were wanderers who adopted Greco-Roman institutions and Hebraic monotheism. In the eyes of Christian theologians, Mohammed was a heretic, not a pagan ; in the words of Muslim lawyers, the Christians were a « people of the Book », not heathens who ought to be either converted or killed.[2] Of course there was mutual hatred and name calling, though probably not as much as during and after the Crusades ; but hatred does not occur solely between peoples of a different creed. It certainly did not prevent poli-

[1] F. Dvornik, *La Vie de St. Grégoire Decapolite et les Slaves Macédoniens au IX^me^ siècle*, Paris, 1926 ; I am indebted to Professor Henri Grégoire for calling my attention to this highly interesting source.

[2] G. E. Von Grunebaum, *Medieval Islam*, Chicago, 1953[2] ; A. S. Tritton, *The Caliphs and their Non-Muslim Subjects*, London, 1930 ; A. J. Visser, *Nikephoros und der Bildersturm*, Haag, 1952.

tical and economic intercourse. To cite only a few illustrations from the Carolingian period, in 813 the ambassadors of the Aghlabid emir aboard a Venetian convoy aided the Christian crew in attacking a convoy of Spanish Muslims. Then they proceeded to Sicily, to renew with the Byzantine governor the agreement which ensured to the citizens of each country the right to travel and trade in the other. A few years later, the Bishop and Duke of Naples — a Christian port which had welcomed Muslim ships as early as 722 — joined the rulers of Amalfi and Gaeta in an alliance with the Muslims against Pope John VIII. The alliance was so profitable that the Pope was unable to win back the support of Amalfi either by threatening excommunication or by offering total customs exemption in Rome and a subsidy of no less than 10.000 silver *mancusi* a year. Ironically, the *mancusi* in all probability were Islamic coins, and the papyrus used by the Pope for his diplomatic campaign was made in Egypt and bore at its top an Arab inscription praising Allah. Should one suggest that the capital of Christianity was too near the Islamic border to be typical of Christian attitudes, we might recall the friendship of Charlemagne and Mohammed's Successor, Harun al-Rashid. It resulted not only in the foundation of an inn for pilgrims in Jerusalem, but also in the establishment of a market across the street, where the pilgrims by paying two dinars a year could carry on their business.

Indirect proofs of the purportedly catastrophic effects of the Arab expansion have been sought for in a supposed aggravation of the general symptoms of economic and intellectual depression in Catholic Europe. We cannot discuss these symptoms without changing our theme to a general investigation of early mediaeval economy and culture. Personally, I do not believe that the depression was more acute in the Carolingian than in the Merovingian period. The earlier centuries of the early middle ages benefited from the fact that Roman roads and towns, institutions and traditions had not entirely disintegrated, and that disheartened

Roman personnel still lent a hand to inexperienced barbarians. The later centuries benefited from the fact that the further shrinking of the legacy of antiquity forced the new world to make its first clumsy attempts at reorganizing roads, towns, institutions and traditions with a personnel of mixed blood and rudimental training. Whether this pale dawn was better or worse than the previous pale dusk is anybody's guess : judgments on cultural achievements depend largely on personal taste, and exact economic comparisons between two adjoining and similar periods cannot be made without some statistical base. But even if Carolingian inferiority were ascertainable it could not be pinned *a priori* on the impact of Arab invasions rather than on the lingering inability of the West to reverse an old downward trend.

It would be still more rash to draw general inferences from ascertained changes of a limited scope. The fact that during the Carolingian period the ports of Provence and Languedoc lost trade to those of northeastern and southwestern Italy, or that Syrian and Greek merchants in the West yielded their prominence to Jews and Scandinavians does not by itself prove a breakdown of Mediterranean commerce any more than the displacement of Seville and Lisbon by Antwerp and Amsterdam in the early modern age denotes a collapse of Atlantic trade. The passing of economy primacy from one people to another is a normal trait of the historical process. Again, the decrease and cessation of the imports of Palestinian wine, Egyptian papyrus and (to a lesser extent) some other Oriental commodities does not necessarily stem from general difficulties in trade. Specific changes in taste, fashions, traditions, and methods of production may be responsible for a wane in the demand or the offer of individual wares. To all this I shall return very soon ; here a passing mention of the problem will be sufficient.

We still have to consider the possibility that trade between East and West came to a virtual end not because of the Arab invasions but owing to the gradual exhaustion of

the gold and silver stocks of Catholic Europe. The problem has been studied by some of the greatest historians of the last generation — Marc Bloch and Michael Rostovtzeff among others — but it is still obscure : monetary phenomena always are hard to interpret, and for the early middle ages information is desperately scant. We do know that the later Roman emperors already expressed alarm at the double drainage of currency through private hoarding and the export of coins or bullion to Persia, India and China in exchange for luxury goods. To be sure, mercantilistic instincts and traditional dislike for extravagant expenditure and foreign manners may have added emphasis to their words ; moreover, they found greedy hoarders and selfish merchants good scapegoats to share the blame for inflation, taxation and economic misery. Still, there is archaeologic confirmation of their claims — hoards within the empire and Roman coins scattered through Asia. The Byzantine Empire made conservation of its stocks of precious metals a cardinal point of its economic policies. The stockpile had ups and downs, but in the early middle ages it never was depleted so much that it was not possible to maintain a stable and fairly abundant currency in gold, silver and copper. The Islamic countries were blessed with sensational discoveries of gold and silver mines. Catholic Europe, however, fell heir to the poorer half of the formerly Roman territory, which had no rich mines and no thriving trades. Hoarding was carried out in abnormally high proportions. Coinage declined in quality and quantity until the only local currency consisted of puny silver deniers struck in modest amounts. Could this not be an indication that Catholic Europe had practically used up its precious metals and no longer had the means to pay for imports from the East ?[1]

[1] M. LOMBARD, *L'Or musulman du VII^me^ au XI^me^ siècle*, in « Annales (E. S. C.) », II (1947) ; S. BOLIN, *Mohammed Charlemagne and Ruric*, in « Scandinavian Economic History Review », I (1953) ; J. WERNER, *Waage und Geld in der Merowingerzeit*, in « Sitzungsberichte der Bayerischen Akademie der Wissenschaften », fasc. 1 (1954) ; P. LE GENTILHOMME, *Le Monnayage et la circulation monétaire dans les royaumes barbares en Occident*, in « Revue Numismatique », ser. 5, VII-VIII (1943-44) ; R. S. LOPEZ, see n. 8.

The answer is not as simple as one might think at first. Probably Catholic Europe would have been unable to carry out large purchases in the Byzantine and Muslim markets with the small amount of coinage it struck and maintained in circulation, or with the Byzantine and Muslim coins that war or trade channeled to its coffers. But there is no reason to assume that Catholic Europe desired to purchase more goods than it could easily afford. Remarkably, the lay and ecclesiastic lords who were the best potential customers of Eastern luxury goods also were the greatest hoarders. Their unspent and cumbersome wealth lay frozen in bars, rings, jewels, and other artistic objects. From the tenth century on, when the revival of trade and culture caused the demand for Eastern goods to skyrocket, those treasures were melted down ; nothing would have prevented their owners from melting them sooner if they had needed cash. Quite to the contrary, what evidence we have conveys the impression that hoards grew in size during the eighth and ninth centuries.

There is no direct way to calculate the balance of payments in the trade of Catholic Europe with the Byzantine and Muslim East, but all that we know about the vast economic and cultural gulf which separated these worlds and about the goods which were prevalent in the exchanges between them enables us to venture a guess. In all probability early mediaeval Europe, with its rude society of affluent lords and penniless peasants, behaved towards the refined and complex societies of Byzantium and Islam like any other backward country that does not crave for many outlandish manufactured goods and has an excess of raw materials available for export. Ordinarily in such cases the balance of payments is favorable to the backward country. The more advanced nations have to offset their com-

mercial deficit by remitting gold and silver, unless they are ready to tip the scales with the sword and impose upon the «inferior» or «infidel» race some sort of tributary or colonial regime. The latter method was not unknown in the early middle ages; Byzantine fiscality and Arab raids often extorted from one or another underdeveloped and weak European country many goods for which no adequate payment was offered. But the Venetians and the Vikings, the Franks and the Jews were too strong or too crafty to yield to sheer force. They must have been paid good cash.

Any guess is open to challenge. Let us assume that our guess was wrong, and that Catholic Europe for a few centuries or for the whole duration of the early middle ages exported cash to pay for the Oriental commodities it wanted to import; would this force us to postulate that its stock of precious metals was eventually exhausted? I do not believe it would. The quantities involved were so small that the local production of gold and silver was more than enough to meet the current demand without drawing from the reserve. A certain amount of silver, it is true, had to be set aside for the striking of deniers; gold, however, was not used by Western mints except for occasional emissions of ceremonial coins or for imitations of Byzantine and Islamic coins. The rest was available for hoarding, adornment and foreign trade. The same princes and prelates who handed out so much gold to smiths in order to have goblets and reliquaries could well deliver gold to merchants in exchange for Oriental spices and perfumes. Their purchases would have sufficed to keep trade with the East going — a small trickle, perhaps, but a stirring, incessant reminder to provincial and countrified Europe that there were other worlds with a quicker, broader and richer way of life.

Eventually not economic stagnation, but economic growth made the monetary stock of Europe inadequate. In the tenth century the laborious search for gold in the Italian, French and German rivers was intensified, and the discovery of rich silver mines near Goslar started a «silver rush» of

considerable proportions. Yet we have good reasons to believe that the exports of Catholic Europe to the Eastern world were increasing. We have to use the richer evidence of the tenth century to supplement that of earlier centuries on which so little is known, but we ought to remember that a new era was already in the making, and that early mediaeval stagnation was about to yield to the Commercial Revolution of the later middle ages.

III.

The sustained debate on the fundamental questions of continuity and volume has been so thoroughly engrossing for the specialists and the amateurs that it has overshadowed the substantial advances of the last two or three decades in other equally important directions: the regulation of trade, the nationality of the merchants, the main commercial routes, and the principal commodities which were exchanged between Catholic Europe and the Byzantine-Islamic world. Progress in these fields was accomplished not so much through broad and daring interpretative essays as through patient monographic research on specific wares, countries, or groups of sources. To be sure, there still remain wide unmapped areas, some of which may never yield to historical and archaeological exploration. But the main lines have emerged clearly, and probably most of the remaining gaps will be filled as the methodical study of hitherto neglected documents and monuments proceeds.

Oriental exports to early mediaeval Catholic Europe consisted predominantly of luxury goods; this much seems definitely established. High costs of transportation and war risks must have stressed this tendency, but did not create it; we have seen that in periods of fast economic growth and broadening distribution of wealth, such as the thirteenth century, costs and risks did not forbid long-distance trade in ordinary goods on a fairly large scale.

What stifled the trade of medium priced wares in the early mediaeval West was economic stagnation and, above all, the extreme thinness of the middle class. Very few persons other than members of the high nobility and high clergy could afford wares coming from distant places. High nobles and clergymen obtained from their estates and their dependants practically all they wanted for ordinary consumption. From the Orient they wanted only extraordinary materials and precious objects which no subject of theirs could produce.

Costly textiles and robes, of such a variety that it defies summary description, were probably the most eagerly sought-for Oriental products. They were almost necessities for men of high rank : wherever and whenever the late Roman tradition survived or revived, silk cloth, purple robes, and gold embroideries were regarded as prime requirements for ecclesiastical ceremonies and as indispensable symbols of political authority. Moreover, vanity and fashion suggested the wearing of precious textiles to virtually all members of the ecclesiastic and lay upper nobility. In Italy this practice was almost unopposed ; it spread even to the lesser nobility and perhaps the higher bourgeoisie. (It would be unwise, however, to believe Liutprand of Cremona when he claims that prostitutes in Pavia wore imperial purples !) Far in the North, the Germanic tradition was more entrenched and combative ; it added warmth to Alcuin's denunciations of clergymen squandering church money on extravagant robes for themselves, and to Charlemagne's pride in wearing nothing but the « vestitus patrius » of plain wool. Yet Charlemagne's own wife and his daughters — whom their possessive father loved too much to marry them off — had stunning silk and purple dresses which inspired the muse of a court poet. Another Carolingian poet, Sedulius of Liége, branded as a miser a man who could afford purple but was content with a fur. At the same period, while Charles the Bald « spurned the tradition of the Frankish kings for the Greek vanity », his brother and enemy, Louis the German,

found it necessary to forbid his Teutonic soldiers to wear silk and embroideries. At any rate, the strongest limitations on the diffusion of Oriental textiles did not come from the occasional frowning of a few Western nationalists and moralists, but from the Eastern end of the trade. Both the Byzantine and the Muslim rulers felt that the best products of their state and private workshops were symbols and instruments of power and prestige ; therefore they restricted severely the quality and the quantity of precious textiles which could be legally exported. But the Muslims usually were less strict than the Byzantines, and smuggling or diplomatic and military pressure obtained from the Byzantines robes that ought to have been reserved for the emperor, the court, or, at least, the citizens of the empire.[1]

Even as silk textiles headed the list of industrial exports of the Byzantine and Muslim world to Catholic Europe, « spices » — that is, a great variety of vegetable and mineral substances used as seasonings, medicinals, and coloring mediums — were paramount among raw materials. The history of early mediaeval trade in spices has been studied less carefully than that of the trade in textiles. It is in fact a more elusive subject, not only because of the greater diversity of the commodities involved, but also because chroniclers were not as interested in the food and medicinals of the princes as in the dress they wore, and because spices are not preserved in museums or portrayed in miniatures. Early mediaeval pharmacopoeias prescribed spices to the same extent and in the same variety as ancient pharmaco-

[1] To the bibliography of R. S. LOPEZ, *Silk Industry in the Byzantine Empire*, in « Speculum », XX (1945), and N. PIGULEVSKAIA, *Vizantiia na putiakh v Indiiu* (Moskva-Leningrad, 1951, useful for early archaeological material) ; M. CANARD, *Le cérémonial fatimite et le cérémonial byzantin*, in « Byzantion », XXI (1951) ; F. E. DAY, *The Tiraz Silk of Marwan*, « Archaeologica Orientalia in memoriam Ernst Herfeld » Locust Valley-New York, (1952) ; R. B. SERJEANT, *Material for a History of Islamic Textiles up to the Mongol Conquest*, in « Ars Islamica », (1942-51). The basic collection of Western material still is that of SABBE in « Revue Belge de Philologie et d'Histoire », XIV (1935).

poeias, but that may be just another symptom of the propensity of physicians to repeat classical formulae without understanding them fully. On the other hand, it is significant that Alcuin did not display towards foreign medicaments the same hostility he showed towards foreign dress. In a letter, of which the addressee is unknown, he mentioned one doctor Basil (a Greek, if we may judge from his name) « who delivered to you some medicinals in the mountains on the way to Rome ». Again, we know that some monasteries grew in their orchards all the pharmaceutical herbs they needed, but the monastery of Corbie included in its shopping lists, both in the seventh and in the ninth century, a good number of Oriental spices. Whether these were for the convent's infirmary, the kitchen, or both, we cannot tell.[1]

There is altogether too little evidence on the eating habits of the early mediaeval upper class either to prove or to disprove Pirenne's contention that the Merovingian gourmet imported from the Orient and Africa the same foodstuffs as his Roman predecessor (that is, chiefly, spices, wine, and oil), whereas the Carolingian gourmet ate local food exclusively. For this gastronomic revolution, of course, he made the Arab invasions responsible. My personal impression is that there was no sudden revolution, but that gradually during the early middle ages the frontier between northern and Mediterranean cuisine was fixed more or less where it lies today — not along what then was the border between Christian and Islamic territory, but where a marked difference in soil and climate invited different plants and different diets. In antiquity the Roman conqueror had brought Mediterranean cooking to the northern élites ; it was natural that the mediaeval Germans, without abandoning all of the culinary refinements of the past, should slowly

[1] L. Mac Kinney, *Early Medieval Medicine*, Baltimore, 1937 ; see also J. Jorimann, *Frühmittelalterliche Rezeptarien*, Zurich, 1925 ; H. E. Sigerist, *Studien und Texte zur frühmittelalterlichen Rezeptliteratur*, Leipzig, 1923.

push Roman recipes back into their original homes. Pepper and other Oriental spices continued to flavor the food of the rich, but apparently they were consumed in more moderate amounts. Wine seldom yielded its place on elegant tables, to ale and mead, but the progress of French viniculture made imports from the Mediterranean unnecessary. (It is true that the Islamic standpoint against fermented drinks made it harder for the famed Gaza wine to compete with France). Butter, which found a more favorable climate in the large prairies and cooler summers of the North than in the Mediterranean world, won the day over oil in Northern France, in Germany, and eventually in Upper Italy. Southern France and peninsular Italy, however, always were and still are faithful to olive oil. This was due first of all to the availability of olive trees and dearth of cattle in those regions, but also to the persistence of all that was Roman, including culinary traditions. There were extensive olive groves in Upper Italy, yet the Lombards repudiated oil ; local production in Southern Italy was not always sufficient, yet the demand for oil was so insistent that substantial quantities had often to be imported from North Africa. Indeed these are the only imports of inexpensive and bulky goods from an Islamic country to Catholic Europe that are recorded in the extant sources.[1]

Besides changes in taste, changes in techniques affected the import trade of Catholic Europe. As a condiment, oil lost ground only in Northern Europe ; but as a detergent and illuminant it was more and more superseded, by fat soap and wax respectively, throughout Catholic Europe and even in the Byzantine Empire, which was one of the world's

[1] Early mediaeval gastronomic history has made little progress since 1943, when I noted its insufficient development (« Speculum », XVIII, 37). A few remarks on spices and wine are found in Violante, ch. I, and especially in D. C. Dennet, *Pirenne and Muhammad*, in « Speculum », XXIII (1948). I am preparing a paper on « Le déclin de l'huile en Occident et en Orient du VII^me^ au XI^me^ siècle », to appear in « Byzantion. ».

largest producers of olive oil. Soap and wax were better suited for cleansing and lighting than oil. Their victory may have been harmful to the import trade, but it spelled technological progress.

The story of papyrus and its younger and better competitors — parchment and, later, paper — is more complicated. At the beginning of the early middle ages the Egyptian papyrus mills, which formerly shipped sizable cargoes to the entire Greco-Roman world, had already lost to parchment two of the most profitable fields : books and private letters. Roman Law, however, made papyrus the only acceptable writing material for legal and official documents ; when used for imperial decrees and privileges, the best papyrus became a symbol of authority like purple ink, purple robes, and the best silks. So long and so far as Roman Law was enforced, papyrus preserved a limited market. The Merovingian chancery used it up to the late seventh century, and the Lombard kings and dukes apparently never converted to parchment (although notaries eventually did, in Italy as well as in France). Their purchases, however, must have been as moderate as their love for writing. Roman Law and papyrus held on in the towns of Rome and Ravenna, in the Papal curia, and in the Byzantine administration up to the tenth or early eleventh century, when the competition of paper, stronger than that of parchment, forced the Egyptian papyrus mills to close down. Inasmuch as paper making had been introduced to the Islamic world by Chinese prisoners captured in the battle of the Talas River (751), its ultimate triumph and the consequent end of papyrus export to Catholic Europe were indeed a distant repercussion of the Arab invasions. Their impact on Europe, however, cannot possibly have been very great.[1]

[1] L. Santifaller, *Beiträge zur Geschichte der Beschreibstoffe im Mittelalter*, I, Graz-Köln, 1953 ; to its almost exhaustive bibliography add A. Grohmann, *From the World of Arabic Papyri*, Cairo, 1952, and J. Irigoin, *Les débuts de l'emploi du papier à Byzance*, in « Byzantinische Zeitschrift », XLVI (1953).

Still among imports to Catholic Europe we ought to mention precious stones and objects of industrial art such as ivory carvings, gold or silver plate, and other metalwork. Obviously this trade was based on quality rather than quantity, but its value may have been much higher than that of papyrus or oil imports. Each item represented a considerable investment, was virtually indestructible, and sometimes passed through many hands before finding its ultimate resting place. Three silver dishes, bearing the control marks of Emperor Anastasius (491-518), ended respectively in a hoard of the Perm province (Ural mountains), at Malaja Pereshchapina near Poltava (Ukraine), and in the Sutton Hoo burial ship (East Anglia), more than a hundred years after they had been manufactured by Byzantine artisans. Archaeologists and art historians have long been interested in this kind of transmission ; it is time for economic historians to join in the effort for the better understanding both of economy and art.[1]

When we turn to the exports of Catholic Europe to the Byzantine and Islamic world, we face greater difficulties. Western evidence, when available, is usually slanted : since a large proportion of the exported commodities (slaves and war materials) were on official black lists, exports were more often condemned than described. Most of the written sources are Arabic or Greek, and have not been fully explored. Moreover, the Eastern world has few museums and sacristies comparable to those of the West, where so many mediaeval imported artistic objects and tools have been stored ; nor were most imports from the Catholic world so beautiful or so durable as to warrant and permit preservation in sacristies and museums.

Swords were the only industrial product of early mediaeval Europe for which there was a sustained demand in the Byzantine Empire and, to a much larger extent,

[1] R. S. Lopez, *Le problème des relations anglo-byzantines du VII^me^ au X^me^ siècle*, in « Byzantion », XVIII (1948) ; for further bibliographic information see the report on artistic relations.

in the Muslim world. This fact looks like a striking illustration of the inferiority of the West in every craft except those of war. It is also worth noting that in all probability the Germanic peoples, who were the best sword makers in Europe, owed their initial superiority to the cultural contacts they had with the peoples of Central Asia during the first centuries of our era, that is, before they settled down in western Europe. Some of the processes they had learned in Central Asia — for instance, the technique of refining steel by cutting it into small fragments, having it eaten by birds, and recovering it from the birds' excrements, a practice which is mentioned in German, Islamic, and Chinese sources — may leave us unconvinced. Laboratory tests, however, have recently vindicated the superiority of Frankish swords over Roman swords, a fact that may help to explain the collapse of the Roman Empire. At any rate the Arabs, who had to test Frankish swords on many a battlefield from Tours to Roncevaux and Barcelona, held them in high esteem. They also liked Scandinavian swords, with their complicated texture intertwining rigid steel and elastic iron, and were able to purchase them more easily, for the Scandinavians were no party to the shaky Christian coalition against the Infidels. Moreover, Scandinavia had purer iron and cheaper smelting fuel than any other country. It could sell better blades at a lower price.[1]

Slaves were by far the most valuable « commodity » that Catholic Europe exported to the Byzantine-Muslim world. In spite of slowly growing ecclesiastic and governmental opposition, the trade prospered because of the steep differ-

[1] A. Zeki Validi, *Die Schwerter der Germanen nach arabischen Berichten des 9.-11. Jahrhunderts*, in « Zeitschrift der Deutschen Morgenländischen Gesellschaft », XC (1936); H. and R. Kahane and H. D. Austin, *Byzantine Indanikos sideros, Frankish Andanicum*, in « Byzantina-Metabyzantina », I (1946); E. Salin, *La civilisation mérovingienne d'après les sépultures, les textes et le laboratoire*, 2 vols., Paris, 1950-52; further information concerning Scandinavia in the report of Prof. Petersen.

ence between Western and Eastern prices, and because slave manpower proved less essential for the rustic European economy than for the refined economies of the East. Though the numbers of slaves probably had been dwindling in the West ever since Rome passed its prime, up to the eighth century every European country had an adequate supply both for the internal market and for export. Prices were higher than in antiquity, but still very moderate: in 725 a French boy was sold in Milan for 12 *solidi*, somewhat less than the price of a good horse. At the same period, an untrained slave in the Umayyad Caliphate would bring approximately a hundred dinars (eight times as much), and one well versed in poetry 600 dinars. Eunuch slaves, employed in harems and sometimes promoted to high posts both in the Muslim and in the Byzantine administration, were particularly valuable. Cheaper slaves would do for humbler tasks. By the ninth century, however, the local supply in Catholic Europe was definitely failing. The merchants then turned their attention to the heathen people beyond the northern and eastern pale of Carolingian and Ottonian Europe, whose souls were irretrievably lost and whose liberty was forfeited « pro peccatis ». War made it possible to obtain many of them free of charge. Others were sold by poverty-stricken parents — a practice which in Tuscany was last heard of in the time of Charlemagne, but in the Black Sea regions survived until the early nineteenth century. While the Catholic world completed the conversion of its economy and ethics from slavery to serfdom, the *sclavi* or *sakaliba*, and probably many old Christians illegally enslaved, were sold to Byzantine schismatics and Muslim infidels. The comparative abundance of references to this commerce contrasts with the poverty of information on all other branches of trade.[1]

[1] C. Verlinden, *L'origine de Sclavus = Esclave*, in « Archivum Latinitatis Medii Aevi », XVII (1942); J. Brutzkus, *Trade with Eastern Europe*, 800-1200, in « Economic History Review », XIII (1943); G. Prunai, *Notizie e documenti sulla servitù domestica nel territorio senese*,

Exports of raw materials such as timber, iron, tin, copper and pitch must have been much more frequent than the extant references might lead one to think. Such trade did not have same human interest as the commerce of men. Yet it was equally important for the Byzantines, who had no tin and little iron, and for the Muslims, who had very little of all of these goods. Without the shipbuilding materials they received the Venetians and other European merchants, the Aghlabids and the Fatimids could hardly have maintained the large fleets which gave them at times the control of the sea; nor would imports of Scandinavian and Indian swords have made up for the scarcity of iron mined in the Muslim world, if Islamic arms-makers had not used iron obtained from Catholic Europe. Yet it was trade in iron, timber, and slaves that gave the Venetians the capital they used in building larger and better ships, with which they wrested from the Muslims the mastery of the sea. Then, as now, trade with the enemy was a double-edged sword.[1]

Toward the end of the early middle ages Catholic Europe added a few items to the list of its exports. Furs, long spurned by the Byzantines and the Muslims as fit only for uncouth barbarians, came into fashion. Even as Frankish noblemen often wore light Greek or Arab silks in the cold climate of the north, so Byzantine aristocrats displayed Russian furs in the temperate breezes of Greece, and Muslim shaikhs tried them on in the sweltering heat of Egypt and Iraq. Wooden barrels, cups and saucers provided Venetian ships bound for Africa and Syria with a more innocuous cargo

in « Bullettino senese di storia patria », XLIII (1936); A. HADJINICOLAOU MARAVA, *Recherches sur la vie des esclaves dans le monde byzantin*, Athènes, 1950.

[1] Some information is found in A. R. LEWIS, *Naval Power and Trade in the Mediterranean, 500-1100*, Princeton, N. J., 1951; A. M. FAHMY, *Muslim Sea-Power in the Eastern Mediterranean from the Seventh to the Tenth Century*, London University, 1950; and in the already cited works of LOMBARD, LOPEZ and LUZZATTO. Altogether the field is not well explored.

than wooden poles and planks for shipbuilding. The best textiles of Italy began to appeal to the Muslims; in the tenth century a Baghdad merchant spoke with great admiration of linen made in Naples. But the tenth century, as we have seen, was not typical of the early middle ages. By that time the general demographic and economic renaissance brought Oriental visitors to the remotest corners of Catholic Europe: one of them was astonished at the quantity of Eastern spices he found in Mainz, another praised the efficient organization of the market in Asti. In turn merchants from Catholic Europe thronged to Eastern commercial centers: in 996 more than a hundred «Amalfitans» are reported to have fallen victim to a pogrom in Old Cairo, which albeit important was probably less frequented by Western traders than such seaports as Mahdiyah, Alexandria, Thessalonica or Constantinople.[1]

IV.

Trade routes, trade regulations, and the nationality of traders are interdependent topics; they must be surveyed together. A description of routes, however, becomes meaningful only when translated into a map. We can take as a basis the good map of Maurice Lombard, « Les relations lointaines des pays mosans », provided we make a few additions in the central and eastern Mediterranean regions.[2] Besides the dots and the lines with which Lombard's outline is covered, my imaginary map would have a number of

[1] J. LESTOCQUOX, *The Tenth Century*, in « Economic History Review », XVII (1947); R. S. LOPEZ, *Still Another Renaissance?*, in « American Historical Review », LVII (1951-52); C. CAHEN, *Un texte peu connu relatif au commerce oriental d'Amalfi*, in « Archivio Storico per le Provincie Napoletane », n. ser., XXXIV (1953-54).

[2] M. LOMBARD, *La route de la Meuse et les relations lointaines des pays mosans entre le VIII^e et le XI^e siècle*, « L'Art Mosan », Paris (1953).

short dotted lines across the Tyrrhenian Sea, to show the surviving relations of Pisa with Rome, Corsica, Sardinia, Sicily, and the African coast (Genoa did not come back into the picture before the late tenth century). Two longer dotted lines along both coasts of the Adriatic would indicate the relations between Venice and Comacchio, Ravenna, Bari, Otranto and the Calabrese coast (on the west side), Capodistria, Arbe, the Dalmatian, Epirote, and Greek ports (on the east side). The principal ports of Algeria and Tunisia and a much larger number of Byzantine trading centers, both in Europe and in Asia, would also be inserted into the map and connected to one another by dotted lines. Finally, I would like to draw the trans-Balkanic roads from Durazzo and Lepanto to Salonika and Constantinople (even though an overland journey from Constantinople to Lepanto seemed an ordeal to Liutprand of Cremona, the disgruntled ambassador), and the trans-Anatolian military and commercial roads which the New Rome inherited from the Old and kept up as best she could. I would still miss the most significant indications that would come from drawing each line and dot more or less broad and heavy according to the comparative importance of each route and harbor. But this is an improvement that cannot safely be made upon Lombard's map without the precise statistical data which unfortunately we shall never possess.

It is not surprising that exchanges between Catholic Europe and the Byzantine-Muslim world flowed largely into a ring of sea and river routes which encompassed Europe without penetrating it : the Mediterranean, the Atlantic, the Channel, the North Sea, the Baltic, the Russian rivers, the Black Sea, and the Mediterranean again. At all times, but more so when trade is at a low point, transportation by water carries larger cargoes and heavier loads than transportation by land, because it is cheaper and because water routes need no upkeep. Again, when an underdeveloped country is in touch with more advanced ones, exchanges are likely to be carried out in its outer fringe much more

intensively than in its internal areas. In my opinion, however, these natural tendencies were emphasized by certain features of the prevailing trade regulations which we must examine briefly.[1]

The economic policies of the Byzantine Empire and the Muslim Caliphate were originally based upon those of their predecessors, the Late Roman Empire and Sasanian Persia. These were almost self-sufficient states, able to produce nearly all that they needed, yet seldom more than they needed in any economic branch. (Luxury goods were remarkable exceptions, but luxuries by definition are not indispensable). Both Rome and Persia were governed by military rulers and landowning aristocrats, who were interested not so much in promoting foreign trade as in preventing its possible dangerous consequences. Foreign merchants might spy into the military and economic secrets of the state or lend assistance to enemy attacks and domestic seditions. Both foreign and national merchants might smuggle out gold, weapons, essential foodstuffs, slaves, or other forbidden merchandise. They might fail to pay custom duties, the one by-product of international trade that governments appreciated. To bring order and avoid incidents, Rome and Persia agreed to confine all mutual exchanges to a small number of fairs to be held under strict state control in specific centers just inside their respective borders. No foreigner was to be permitted to go further than these outposts or to linger there after the end of the fair. Rome also established similar outposts along the northern border and on the Upper Nile, for trade with the Germans and the Nubians ; whether Persia also had outposts for trade with her barbarian neighbors, we do not know.

[1] The basic bibliography on early mediaeval international trade regulations and commercial policies is found in R. S. LOPEZ, *Du marché temporaire à la colonie permanente*, in « Annales (E. S. C.) », IV (1949). More recent are F. L. GANSHOF, *Le Moyen Age*, vol. I of RENOUVIN, ed., « Histoire des relations internationales », Paris, 1953, and a mediocre article of J. GAUDEMET, *L'Empire Romain a-t-il connu les foires ?*, in « Recueils de la Société Jean Bodin », V (1953).

In the early middle ages border outposts played an important part in the best organized states. In this respect as in so many others, Byzantium was the most conservative. Naturally it had to relocate the outposts as its borders contracted : the functions which in the fifth century had belonged to the fairs of Nisibin near the Tigris and Commercium near the Danube, in the tenth century were carried out in the fairs of Trebizond and Salonika. The Muslim Caliphate and its successor states with less determination adopted a similar policy. A very old Arab tradition threw all the Islamic territory open to any foreigner who had received an *aman* (safeconduct) from any Muslim ; nevertheless, it has been proved that border outposts of the Roman and Byzantine type existed in Egypt throughout the early middle ages and in various other Muslim states at various periods. In the Lombard and Italian kingdom the system of *clusae*, although looser than border outposts, bore unmistakeable marks of Byzantine influence ; in turn, it found a pale reflection in the *clusae* and the control posts which Charlemagne set up respectively on the French coast facing England and along the Slavic and Avar land border from the Baltic to the Alps. Clearly the enforcement of this system tended to stress the concentration of trade between East and West in the outer fringe of Europe.

Early mediaeval international exchanges, however, were much harder to channel than the exchanges of ancient Rome and Persia. Commerce in general may have contracted, but foreign trade had become comparatively more essential, for no state approached the degree of self-sufficiency attained by these mighty empires — not even the early Caliphate, which was gigantic but had deficiencies in the key raw materials we have just mentioned. Moreover, the collapse of the *limes* and the partition of the *mare nostrum* had engendered states with winding land borders and extensive sea fronts, which could not be sealed as tightly as the Roman and Persian borders. Through wedges in the land frontier, foreign caravans could suddenly show up at the gates of

towns far in the interior. Through open sea, and some times upstream on ill — guarded rivers, foreign ships could reach at any moment vital centers and capitals such as Paris, Damietta and Constantinople. Virtually all harbors and road termini had to be equipped to play the functions of border outposts whenever necessary. This was achieved in the Byzantine Empire through the *apothéke tôn basilikôn kommerkíon* (depot for imperial trade), in the Muslim states through the *funduq* (from Greek *pandokheîon*, general depot), and in the best organized Catholic states through the *portus* or *portura legitima*. About these institutions, which varied from place to place, we know very little — for the Byzantine *apothéke* we have almost no other evidence than the seals of custom officials who presided over it — but they all seem to have been permanent buildings or barracks where foreign merchants stopped temporarily while their ships, mules or camels loaded and unloaded, and transacted their business under the eye of state officials.

The multiplication and dispersion of outposts led the Byzantine governement to reverse its policy and strive to concentrate international trade not where the distance was greatest but where supervision was easiest — on the very outskirts of Constantinople. Foreign merchants coming from friendly countries were to some extent assimilated to foreign ambassadors, who were quartered in specially guarded lodgings (*mitâta*) in the suburbs of the capital. If their passports (*sigíllia*) were in order, they also could live in the *mitâta* and carry out their trade in the political and economic heart of the empire. But they were constantly watched by a host of high, medium and petty officials, and they had to leave punctually when the passport had expired — usually, after three months. Certain features of the *mitâta* were also found in Muslim and Catholic capitals : thus, for instance, Pavia invited merchants coming from the Venetian and Campanian coast to pitch their tents in an empty square outside the wall for the duration of two annual fairs which were held under the vigilance of state offi-

cials. By and large, however, the *mitâta* were a typically Byzantine institution, unmatched elsewhere. The first mention of them is found in the late ninth century, but at that time they were already old and well rooted. Naturally the emergence of the *mitâta* reduced the incentive for Greek merchants to travel long distances and meet foreign merchants abroad. It was far more comfortable and safer to wait for their arrival at the Byzantine capital.

Official regulations failed to provide for trade with unfriendly nations or commercial ties requiring unlimited residence on the part of aliens. These obstacles were often turned through two unofficial solutions, which we might call, in modern and hence anachronistic terms, « multiple nationality » and « limited naturalization ». The latter placed under the qualified protection of the government individual aliens or groups whose indefinite stay was not regarded as dangerous, either because they had no ties to any other state, or because they could expect no effective assistance from their state, or because their numbers were small. The typical instance is that of the Jews, but there also were other stray *ethnikoi*, *dhimmi*, or *waregangs* who, at the price of certain economic and political restrictions, obtained from an emperor, a king, an emir or a vassal permission to stay in a country which was not theirs. Both their rights and their obligations varied from place to place, and were enforced more or less strictly according to the will and power of the ruler of the country. Not all of them had come as merchants. Some were religious dissenters, political refugees, unsuccessful raiders, escaped criminals or adventurers. Still their marginal status in the society and economy of the country eventually drove them to international trade, the only profession where their handicaps might be turned to advantage. Because they were not full citizens anywhere, they were not likely to be regarded as full strangers anywhere.

It was still better to be full citizens in more than one country. This, in all probability, for a long time was the

status of those Syrian and Greek merchants who did not leave the West after the Germans conquered it. Before the conquest they had enjoyed full rights both in the Eastern and Western Roman Empire ; they preserved them in the surviving Eastern Empire and were not counted as aliens in the German states until these states formally discarded the nominal overlordship of Constantinople. Later on, multiple nationality was made inevitable for many towns which were caught between two warring adversaries and had to give tokens of allegiance to both sides at once. Compromises of this kind sometimes were sanctioned by treaty. Under the Arab-Byzantine treaty of 689 the island of Cyprus paid tribute to the Caliphate and to the Empire at the same time, and was officially intrusted with disclosing to each party any hostile preparations that the other party might make. After the political and commercial treaty of 812 between the Byzantine and the Carolingian empires broke down, Venice without disowning her allegiance to Constantinople concluded with the Western emperors a series of agreements which enabled the two empires to exchange wares without exchanging recognition. Byzantium did not object when her Venetian or Campanian subjects paid tribute to Germanic rulers or extended diplomatic and commercial favors to Muslim states, provided no vital war materials were supplied to a warring enemy. In general, Italy was *par excellence* the land of ambivalent or three-cornered loyalties rewarded by two fold or three fold citizenship. Byzantines, Muslims, Lombards and Franks might wish to enlarge their spheres of undivided sovereignty, but at the border they needed buffer states through which to pursue international trade. An indirect, but striking illustration of the importance of these intermediaries in maintaining relations, even in the midst of war, may be found in the path followed by the greatest plague of the early middle ages. The plague was raging in Syria in 744, but did not reach Constantinople directly across the Anatolian frontier, which was barred by a Muslim-Byzantine war. It arrived

in 747 through the devious way of Egypt, Sicily, Calabria, and the southern Greek port of Monemvasia. George Finlay was probably right in suggesting that it was introduced from the Muslim to the Christian world by Venetians (and Campanians, we may add) who carried on trade between the belligerent nations.

Far be it from us to maintain that the regulations of trade which we have schematically outlined were steadily and consistently enforced. Yet their general framework seems to have played a great part — greater than is usually realized — in determining what peoples were to be prominent in international trade. First we find in the foreground Oriental Jews, Greeks and Syrians, accepted in the Byzantine and the Germanic world on equal terms. Their settlements in the West must not be confused with the better known « commercial colonies » of the later middle ages, for they had no extra-territorial status and no rights, duties, privileges or restrictions that could not have been extended to similar groups of local origin. Then, between the seventh and the ninth century, the picture changes. The Syrians become totally estranged through inclusion in the Muslim commonwealth, and, later, the Greeks withdraw to the hothouse of their *mitâta*, while the Jews gain absolute prominence in spite of their handicaps or, rather, because of their handicaps. *Radaniya* Jews shuttle between Spain and China, all the way through the hemisphere, carrying along three different routes, overland and overseas, a great variety if not a large amount of wares. Carolingian capitularies and Byzantine law books significantly refer to « the Jews and the other merchants », as if to imply that in foreign trade Gentiles are but a minority. Western and Oriental Jews also make their way to the wilderness of northern Europe, where commerce is indiscriminately free for all daring men since there are no organized states to regulate it. Here they have to compete with stronger though less cultured people such as the Scandinavians (whose detailed story I shall leave for the report of my learned colleague, Professor Petersen). It is not in the north, however, that the Jews face the most dangerous competitors, but in the south. The Venetians, Amalfitans, Neapolitans, and other Italian merchants of the buffer zone are growing fast. They are not irretrievably discriminated against as the Jews, nor irretrievably distant from the Mediterranean center of Oriental trade as the Scandinavians, nor irretrievably tied to the economic systems of antiquity as the Byzantine. Soon they will break loose from the strained bonds which connect them to conflicting overlords, and they will organize free Communes — that is, governments of the merchants, by the merchants, and for the merchants. The future is theirs.[1]

Trade regulations, of course, were not the only determinant causes for the shifting of commercial primacy from one people to another. Other influential factors were the personal ability and initiative of individual merchants, the prevailing attitudes of the different groups in regard to trade and its standards, and the impact of political events on the fortunes of each people. The latter, however, is not for us to summarize ; we leave political history to the reports of Professors Bognetti and Dölger. As for the character of individual merchants, we can call ourselves fortunate when the documents disclose the name of one of them and some scraps of information about his field of activity ; there is never enough to attempt an analysis of his personality. Group attitudes are the only ones that may lend themselves to some prudent generalizations.

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[1] P. LAMBRECHTS, *Le commerce des Syriens en Gaule*, in « Antiquité classique », VI (1937) ; G. MICKWITZ, *Der Verkehr auf dem Westlichen Mittelmeer um 600* », in « Festschrift A. Dopsch », Leipzig (1938) ; F. L. GANSHOF, *Note sur les ports de Provence du VIII^e^ au X^e^ siècle*, in « Revue Historique », CLXXXIII (1938) ; W. J. FISCHEL, *The Jews in the Economic and Political Life of the Medieval Islam*, London, 1937 ; J. STARR, *The Jews in the Byzantine Empire*, Athens, 1939 ; L. RABINOWICZ, *Jewish Merchant Adventurers*, London 1948 ; A. SOLMI, *L'amministrazione finanziaria del regno italico nell'alto medio evo*, Pavia, 1932 ; G. LUZZATTO, *Storia economica d'Italia*, I, Roma, 1949 ; J. LESTOCQUOY, *Les villes de Flandre et d'Italie sous le gouvernement des patriciens*, Paris, 1952.

The attitude toward interest charges may be used as a fairly significant test, provided we keep in mind, on the one hand, that « doctrinaires » and practical men do not always follow parallel paths, and, on the other hand, that neither group is impervious to the influence of the other. Byzantium inherited from Rome the notion that interest bearing loans are perfectly legitimate so long as the charge is not unreasonably high. This viewpoint was reflected in official legislation, which established maximum rates but did not disallow interest, and in popular literature, which often was kind to the God-fearing moneylender. (Not the usurer, but the merchant of slaves was the typical villain in Byzantine hagiography). It was, on the whole, advantageous to trade, but the maximum rate, usually enforced with Byzantine thoroughness, was too low for the extraordinary risks of international trade and must have helped to persuade many merchants to hang on to the *mitâta*. — Muslim religion absolutely forbade the taking of interest, and this may have contributed to the ascendancy of *dhimmi* (protected Christian and Jewish) moneylenders. Up to the late tenth century Syrian Christians, who, like the Byzantines, regarded interest as legitimate, seem to have been predominant in the profession ; the Jews at that time were more active in commerce proper than in banking, though some of them were great financiers. At any rate, the great development of Muslim economy demanded a rehabilitation of interest and obtained it. A Syrian manual of trade (early tenth century ?) cited an obviously apocryphal saying of the Prophet advising a man who had thrived on money lending to persevere in it. More subtly, an eleventh century jurist stated that it was not forbidden for a borrower to pay more than he had received, if he did so of his free will and without making any promise in writing. — Catholicism, as is well known, forbade the taking of interest as strongly as Islam. The clergy were unanimous in supporting the condemnation of usury, in theory at least, but the attitude of laymen was not everywhere alike. While the Merovingian

formulae called the loan « an act of charity » and Charlemagne officially outlawed « usury » in a capitulary of 789, in Lombard Italy King Liutprand mentioned the *onus solidorum* (interest) as perfectly legitimate, and the *Summa Perusina* (late eighth century ?) defined the loan as a «dare et recipere ad usuram ». — Interest of one kind or another is mentioned in legal contracts of the buffer zone between Lombard and Byzantine territory in Italy. — The law of the Jews was based upon Deuteronomy XXIII, 20 : « Unto a stranger thou mayest lend upon usury, but unto thy brother thou shalt not lend upon usury ».[1]

The unprecedented development of pilgrimage, in an age of languishing commerce and diminished mobility, played an important part wherever it occurred. This means that its benefits were felt throughout the hemisphere. All along the routes of Buddhist, Muslim, Jewish and Christian pilgrims the demands of the travelers, modest though they were, gave some impulsion to the repair of roads and the foundation of inns. But it was natural that pilgrimage brought the best results to the people whose religion made it a cardinal duty of all the faithful. The Koran, in outlining the rules which pilgrims must follow, expressly states that « there is no blame for you in seeking a bounty from the Lord », that is, in engaging in trade during the journey. It was a reasonable solution, since very few pilgrims had enough cash of their own to pay for the long trip to Mecca, and alms, though frequently generous, were unpredictable. Christian pilgrims, however, did not have permission to carry on trade and were expected to be content with what alms might be forthcoming from day to day. Their personal

[1] B. Nelson and J. Starr, *The Legend of the Divine Surety and the Jewish Moneylender*, in « Annuaire de l'Institut de Philologie et d'Histoire Orientales et Slaves », VII (1939-44) ; W. Heffening, *Beiträge zum Rechts- und Wirtschaftsleben des Islamischen Orient*, I, Hanover, 1925 ; F. Arin, *Recherches historiques sur les opérations usuraires et aléatoires en droit musulman*, Paris, 1929 ; E. Besta, *Le obbligazioni nella storia del diritto italiano*, Padova, 1937 ; B. N. Nelson, *The Idea of Usury*, Princeton, N. J., 1949.

property, if any, was exempted from custom duties in every Catholic state on condition that it would not be used for trade. It is no wonder that they often indulged in smuggling — Catholic, Byzantine and Muslim officials were always on the alert at their passing — but the fact that commercial activities were forbidden both by law and by religion must have restricted the contribution that Catholic pilgrimage might otherwise have made to international trade.

Commerce in general occupied a different position in Muslim, Catholic, and Byzantine society. Mohammed's own example had pointed out to his followers the honorableness of commercial pursuits. In the ninth century a book of Islamic religious traditions (*Tirmidh*) paid the profession the highest tribute it has ever received: « The truthful, honest merchant is with the prophets and the truthful ones and the martyrs ». In sharp contrast to this, the dominant Western tradition combined against the merchant the Roman bias against non-agricultural callings, the German contempt for unwarlike occupations, and the Christian mistrust of professions seeking for worldly riches earned without painful toil. It is true that there were nuances. The Lombard *negotiatores potentes* in 750 were assimilated to landowners holding at least seven country homesteads; an English pamphlet of the early eleventh century stated that « if a merchant throve so that he fared thrice over the wide sea by its own means, then was he henceforth of thegn-right worthy »; even a Jew could attain a respectable rank in Merovingian or Carolingian France if he was a « king's merchant ». Still, the merchant class could expect little from the early mediaeval Western society of warriors, clergymen and peasants. Nor was its average standing much higher in Byzantine society. Here the nobility did not always neglect the chances of investing money in commerce and industry, but it usually followed the classic tradition of having these lower professions exercised by slaves and journeymen in their behalf. Only in the cities of the buffer districts, such as Venice, Amalfi, Gaeta, or Kherson on the Black Sea, do we find some indications that members of the nobility personally engaged in trade. So did some of the noblest Scandinavians. So did the great majority of the Jews.

V.

To the last topic I wish to submit for discussion — the most interesting, perhaps — I shall devote only a very small proportion of the space allotted to me. One year ago I wrote a long article on the subject: « Les Influences orientales et l'éveil économique de l'Occident ». I am painfully aware of its many shortcomings, but in twelve months I have not learned enough to write a better one. All I can do now is to condense in two or three pages what I said in the ten or fifteen pages of its central sections, and to apologize for the fact that brevity does not permit me to qualify the generalizations I shall have to venture.[1]

Influences are a fascinating but elusive theme. One can never be sure that similar ideas and techniques arising successively in adjacent countries are due to direct transmission from one country to the other rather than to independent responses prompted by similar challenges. Even when an influence seems undeniable, it is usually difficult to single out the precise period at which the transmission occurred. Thus, for instance, it is enough to open an etymologic dictionary to appreciate the depth of the Muslim imprint on the language of commercial practice. English, which bears fewer marks than the Romance languages, owes to Arabic or Persian such everyday words as traffic, risk, cheque, magazine, bazar, fardel, tare, and tariff, not to mention the names of innumerable commodities. We still ought to find out in each case when the Arabic root came into use, in order to decide whether a transmission may have

[1] The essential bibliography will be found in my article in « Journal of World History », I (1954).

occurred in the early middle ages, in the later middle ages, or even in modern times through the intermediary of another language. The same work ought to be done on Byzantine roots, which are less frequent in contemporary languages, but were equally common in mediaeval speech as set down in documents. To my knowledge such a research has never been systematically undertaken, but it might yield interesting results when other evidence is lacking or ambiguous.

Nevertheless, it is chiefly to the comparative study of specific institutions that we ought to turn for a precise evaluation of the influences of the Byzantine and Muslim world upon the economic organization of Catholic Europe. Unfortunately this is another ill explored field. Evidence is not scantier here than on other aspects of early mediaeval economic life, but historians of commercial law and practices have hesitated to tackle problems that call for an equally thorough knowledge of the Western and Eastern worlds. For the majority of contracts we have not advanced beyond Levin Goldschmidt's admirable, but old *Universalgeschichte des Handelsrechts* (published in 1891). Ashburner's excellent monograph on the Rhodian (Byzantine) Sea Law and its wide influence on maritime law throughout and beyond the Mediterranean is almost fifty years old. More recently an Italian scholar rightly pointed out the relationship of the *commenda* contract, the most important of Western Mediterranean maritime trade from the ninth or tenth century on, to the Byzantine *chreokoinonía*. He made no allusion to the *daneion epí koinonía*, mentioned in the Byzantine « Ecloga » and possibly related to the Western *societas terrae* ; nor did he mention the Muslim *muqarada* and the Hebrew contracts of the same kind, which also are strikingly similar to the *commenda*. On the Byzantine and Muslim organization of banking and credit, which bids fair to have influenced deeply the incubation of Western banking, there is no detailed study of any sort.

Exploration of the possible Oriental influences on Western market and guild organization has been equally spotty.

Gunnar Mickwitz, Arrigo Solmi and others have noted the resemblance between tenth century Constantinople as described in the « Book of the Prefect » and Pavia as depicted in the « Honorantie civitatis Papie ». The *scholae* of Ravenna and Rome, whose very name is Byzantine, have been studied to some extent. I have endeavored to link the western organizations of moneyers (*sacramenta*) of the early middle ages to the Byzantine *demósia sómata* of moneyers and other imperial guilds.[1] The obvious relationships of some guilds of Catholic Spain to Muslim guilds of the same territory have often been mentioned. I do not know of any other work in this general field. Yet the re-emergence of Muslim religious guilds of craftsmen in the ninth century is but slightly earlier than the appearance of confraternities of craftsmen in Western Europe ; the Byzantine regulation of builders is the only extant early mediaeval parallel of the

[1] I take this opportunity to answer a criticism which was made repeatedly by Professor Dölger and once by his former student B. Sinogowitz : « Byzantinische Zeitschrift », XLII (1950), pp. 244 and XLVI, (1953), pp. 235, 472 ; « Saeculum », IV (1953), 321. They said that I have not sufficiently proved that regulation of the *demósia sómata*, and most particularly of the moneyers, goes back to Heraclius instead of being a mere copy of Roman Law with a penalty changed according to the tenth century *Prochiron Legon*. That my evidence could only be circumstantial, owing to the lack of sources, I explicitly stated. The basic fact is that the regulation is not found in the extant manuscripts of Roman Law but only in one of the Basilics ; the reasons for dating it back to Heraclius are offered as a suggestion in « Byzantion », XVI (1942-43), pp. 445-61. Against my evidence my learned opponents bring no evidence of any kind except the statement that all there is in the Basilics is Roman Law, with some modifications of penalties derived from the *Prochiron Legon*. This is the solution Zachariae von Lingenthal found more than fifty years ago to reconcile the then prevailing opinion that Byzantine civilization was entirely unoriginal with the fact that the Basilics do not always conform to the texts of Justinian, albeit they do conform in most cases. We have long since abandoned the idea that the history of Byzantium was nothing but « a decadence ending in catastrophe » ; the idea still survives in legal history, mainly because legal history has not advanced as much as other fields. Without the slightest disrespect for my colleagues I submit that, meager though my evidence may be, it is more than no evidence at all. The burden of the proof seems to be upon them and not upon me.

Lombard regulation of builders ascribed to King Grimwald or Liutprand ; Jewish travelers of the tenth century supply us with the first descriptions of the markets of Asti and Prague. These are only a few instances of the material which is waiting for scholars to investigate. I would be very rash indeed if I ventured general comments before the first spade work has been done.

Happily the transmissions of material techniques and tools have received far greater attention than the borrowing of ideas and institutions. Archaeologists, scientists, and amateurs have been of great assistance to historians in this complex and highly controversial subject, which defies summary description. Once again, as a year ago, I shall limit my comments to the crucial techniques of transportation. Oriental influences on Western shipping and navigation were overwhelmingly great. With reason, La Roncière and Manfroni in their classic histories of the French and Italian marines sought in Byzantine and Islamic sources the explanation and the origin of the great majority of the terms relating to ships, shipbuilding, officers' ranks, naval strategy, and navigation techniques. A mediaeval fleet was a *stolium* (from Greek *stólos*) led by an admiral (from Arabic *amir*) ; it was built on the *scaria* (from Greek *schária*) and repaired in the arsenal (from Arabic *dar al-sana'ah*). The list could continue for pages. *Nomen omen* : the language is but one testimony of borrowings of which there is plentiful written and pictorial evidence. To cite only one glorious instance, the name of the galley, queen of the sea throughout and beyond the middle ages, derives from Byzantine Greek *galaîa*, swordfish. It makes its first appearance in written sources as an auxiliary Byzantine warship, in the « Tactics » of Emperor Leo VI (886-912). What is more, Oriental origin may sometimes be postulated even when language would tend to make us believe the contrary. Of the lateen sail, in spite of a name which popular etymology might link to the Latin West, the earliest possible figurative representation (not very perspicuous) is in a pre-Islamic church

of Palestine, and the earliest clearly identifiable ones are in two Greek manuscripts of the ninth century. Though the greatest impact of Oriental influences was probably in the later middle ages, when contacts were closer and when the West needed to fortify its merchant and military shipping, reception in most cases must have occurred in the early middle ages, when underdeveloped Catholic Europe was more willing to accept the stamp of more advanced civilizations.

Oriental influences on Western land transportation seem to have been less extensive but equally vital. The progress of Muslim animal husbandry slowly spread to Catholic Europe and enabled it to obtain better horses and mules, and, after the tenth century, also cheaper ones. More important still, the Orient almost certainly gave Europe the three momentous inventions which enabled horses and mules to pull heavier loads for a longer time and on harder roads : tandem attachment, the stiff horse collar, and the horseshoe. The latter seems to have come to the West via Byzantium, but tandem attachment and the stiff horse collar in all probability were Slavonic adaptations of Turkish or Mongolian techniques. The Byzantine Empire never adopted them.

This leads us back to our initial statement : it is good to embrace in one picture the Roman-barbarian and the Byzantine-Muslim worlds, but it would be still better to broaden the picture until it encompasses the entire hemisphere between the Atlantic and the Pacific, the strait of Gibraltar and the islands of Japan.

R. S. Lopez